

(i) *Discharges into an underground mine.* (1) Discharges into an underground mine are prohibited, unless specifically approved by the regulatory authority after a demonstration that the discharge will—

(i) Minimize disturbance to the hydrologic balance on the permit area, prevent material damage outside the permit area and otherwise eliminate public hazards resulting from surface mining activities;

(ii) Not result in a violation of applicable water quality standards or effluent limitations;

(iii) Be at a known rate and quality which shall meet the effluent limitations of § 816.42 for pH and total suspended solids, except that the pH and total suspended-solids limitations may be exceeded, if approved by the regulatory authority; and

(iv) Meet with the approval of the Mine Safety and Health Administration.

(2) Discharges shall be limited to the following:

(i) Water;

(ii) Coal processing waste;

(iii) Fly ash from a coal-fired facility;

(iv) Sludge from an acid-mine-drainage treatment facility;

(v) Flue-gas desulfurization sludge;

(vi) Inert materials used for stabilizing underground mines; and

(vii) Underground mine development wastes.

[48 FR 43990, Sept. 26, 1983]

**§ 816.42 Hydrologic balance: Water quality standards and effluent limitations.**

Discharges of water from areas disturbed by surface mining activities shall be made in compliance with all applicable State and Federal water quality laws and regulations and with the effluent limitations for coal mining promulgated by the U.S. Environmental Protection Agency set forth in 40 CFR part 434.

[47 FR 47222, Oct. 22, 1982, as amended at 48 FR 44051, Sept. 26, 1983]

**§ 816.43 Diversions.**

(a) *General requirements.* (1) With the approval of the regulatory authority, any flow from mined areas abandoned

before May 3, 1978, and any flow from undisturbed areas or reclaimed areas, after meeting the criteria of § 816.46 for siltation structure removal, may be diverted from disturbed areas by means of temporary or permanent diversions. All diversions shall be designed to minimize adverse impacts to the hydrologic balance within the permit and adjacent areas, to prevent material damage outside the permit area and to assure the safety of the public. Diversions shall not be used to divert water into underground mines without approval of the regulatory authority under § 816.41(i).

(2) The diversion and its appurtenant structures shall be designed, located, constructed, maintained and used to—

(i) Be stable;

(ii) Provide protection against flooding and resultant damage to life and property;

(iii) Prevent, to the extent possible using the best technology currently available, additional contributions of suspended solids to streamflow outside the permit area; and

(iv) Comply with all applicable local, State, and Federal laws and regulations.

(3) Temporary diversions shall be removed promptly when no longer needed to achieve the purpose for which they were authorized. The land disturbed by the removal process shall be restored in accordance with this part. Before diversions are removed, downstream water-treatment facilities previously protected by the diversion shall be modified or removed, as necessary, to prevent overtopping or failure of the facilities. This requirement shall not relieve the operator from maintaining water-treatment facilities as otherwise required.

(4) A permanent diversion or a stream channel restored after the completion of mining must be designed and constructed so as to restore or approximate the premining characteristics of the original stream channel, including any natural riparian vegetation, to promote the recovery and enhancement of the aquatic habitat.

(5) The regulatory authority may specify design criteria for diversions to meet the requirements of this section.

(b) *Diversion of perennial and intermittent streams.* (1) The regulatory authority may approve the diversion of perennial or intermittent streams within the permit area if the diversion is located and designed to minimize adverse impacts on fish, wildlife, and related environmental values to the extent possible, using the best technology currently available. The permittee must construct and maintain the diversion in accordance with the approved design.

(2) The design capacity of channels for temporary and permanent stream channel diversions shall be at least equal to the capacity of the unmodified stream channel immediately upstream and downstream from the diversion.

(3) The requirements of paragraph (a)(2)(ii) of this section shall be met when the temporary and permanent diversions for perennial and intermittent streams are designed so that the combination of channel, bank and flood-plain configuration is adequate to pass safely the peak runoff of a 10-year, 6-hour precipitation event for a temporary diversion and a 100-year, 6-hour precipitation event for a permanent diversion.

(4) A permanent stream-channel diversion or a stream channel restored after the completion of mining must be designed and constructed using natural channel design techniques so as to restore or approximate the premining characteristics of the original stream channel, including the natural riparian vegetation and the natural hydrological characteristics of the original stream, to promote the recovery and enhancement of the aquatic habitat and to minimize adverse alteration of stream channels on and off the site, including channel deepening or enlargement, to the extent possible.

(5) A qualified registered professional engineer must separately certify both the design and construction of all diversions of perennial and intermittent streams and all stream restorations. The design certification must certify that the design meets the design requirements of this section and any design criteria set by the regulatory authority. The construction certification must certify that the stream-channel diversion or stream restoration meets

all construction requirements of this section and is in accordance with the approved design.

(c) *Diversion of miscellaneous flows.* (1) Miscellaneous flows, which consist of all flows except for perennial and intermittent streams, may be diverted away from disturbed areas if required or approved by the regulatory authority. Miscellaneous flows shall include ground-water discharges and ephemeral streams.

(2) The design, location, construction, maintenance, and removal of diversions of miscellaneous flows shall meet all of the performance standards set forth in paragraph (a) of this section:

(3) The requirements of paragraph (a)(2)(ii) of this section shall be met when the temporary and permanent diversions for miscellaneous flows are designed so that the combination of channel, bank and flood-plain configuration is adequate to pass safely the peak runoff of a 2-year, 6-hour precipitation event for a temporary diversion and a 10-year, 6-hour precipitation event for a permanent diversion.

[48 FR 43991, Sept. 26, 1983, as amended at 73 FR 75882, Dec. 12, 2008]

#### **§ 816.45 Hydrologic balance: Sediment control measures.**

(a) Appropriate sediment control measures shall be designed, constructed, and maintained using the best technology currently available to:

(1) Prevent, to the extent possible, additional contributions of sediment to streamflow or to runoff outside the permit area,

(2) Meet the more stringent of applicable State or Federal effluent limitations,

(3) Minimize erosion to the extent possible.

(b) Sediment control measures include practices carried out within and adjacent to the disturbed area. The sedimentation storage capacity of practices in and downstream from the disturbed area shall reflect the degree to which successful mining and reclamation techniques are applied to reduce erosion and control sediment. Sediment control measures consist of the utilization of proper mining and reclamation methods and sediment